



DGSIT Program

Presentation for COMMANDER, THIRD FLEET C4I WATERFRONT CONFERENCE



CDR Mark Fickel, Program Director
mark.fickel@navy.mil (757) 417-6771 x3

Mr. Mike Wenck, DGSIT PAC Surface Combatant Coord.
mike.wenck@navy.mil (619) 437-5275



DGSIT

Deploying Mission Systems

Integration Testing is a

CFFC/HQMC directed,

COMNAVNETWARCOM

executed program designed to

support the fleet readiness

program by validating the

deploying group's **C5I Systems**

interoperability to the Numbered

Fleet, MEF, Deploying Group

Commanders, and **technical**

Program Offices.

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Operational Readiness, Effectiveness, Prima



DGSIT

Deploying Group Systems Integration Testing

- ◆ A validation and quality assurance process
- ◆ Last look in the FRTP process (tech to operator handoff)

Charter (CLF/CPF Inst 4720.4a)

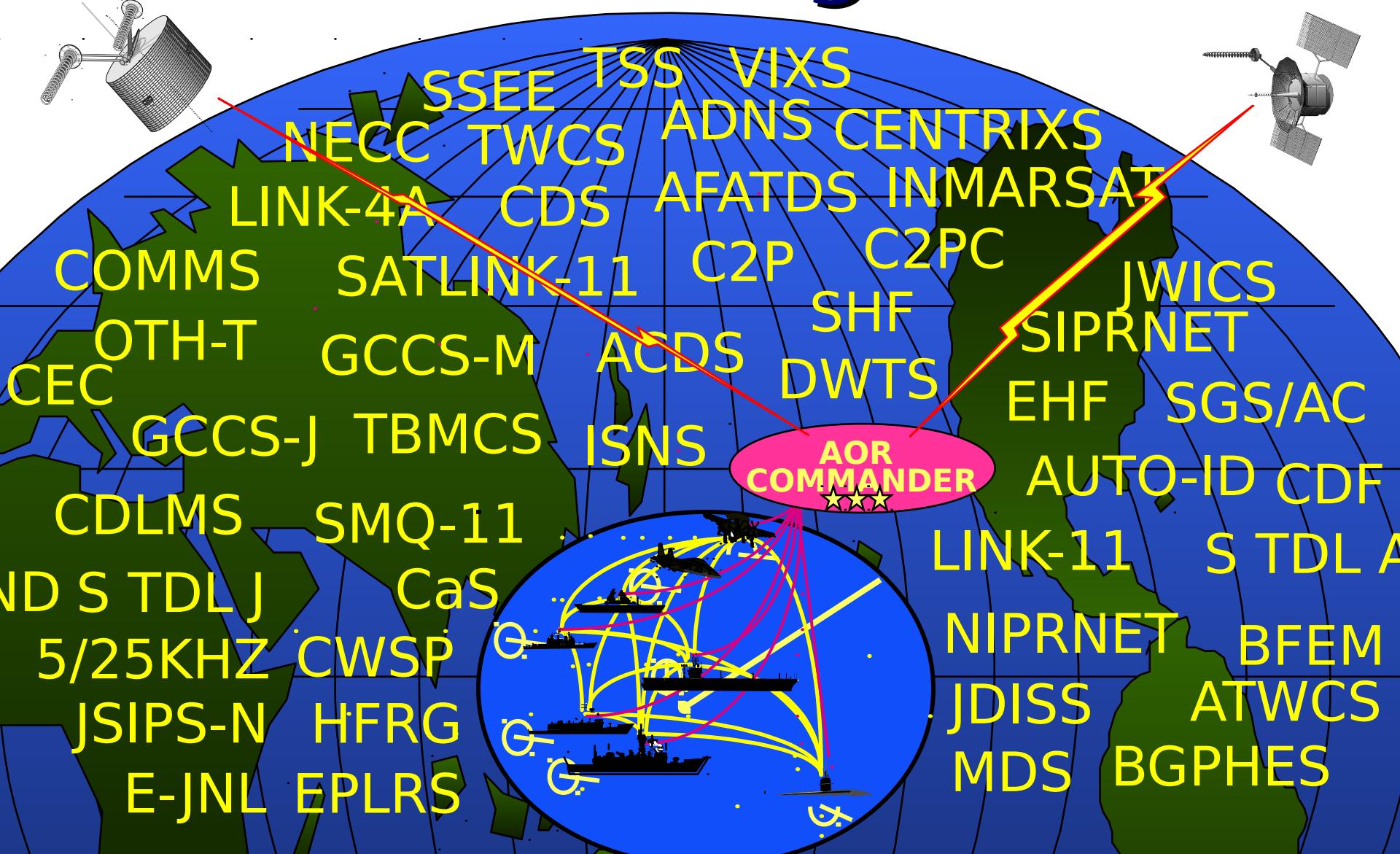
- ◆ Determine problems/validate operation
- ◆ Develop Deploying Group Test Plan

System Configuration Interoperability among
systems within the solution

***Interoperability among
systems within the
STRKGRU***



Deployers' Challenge

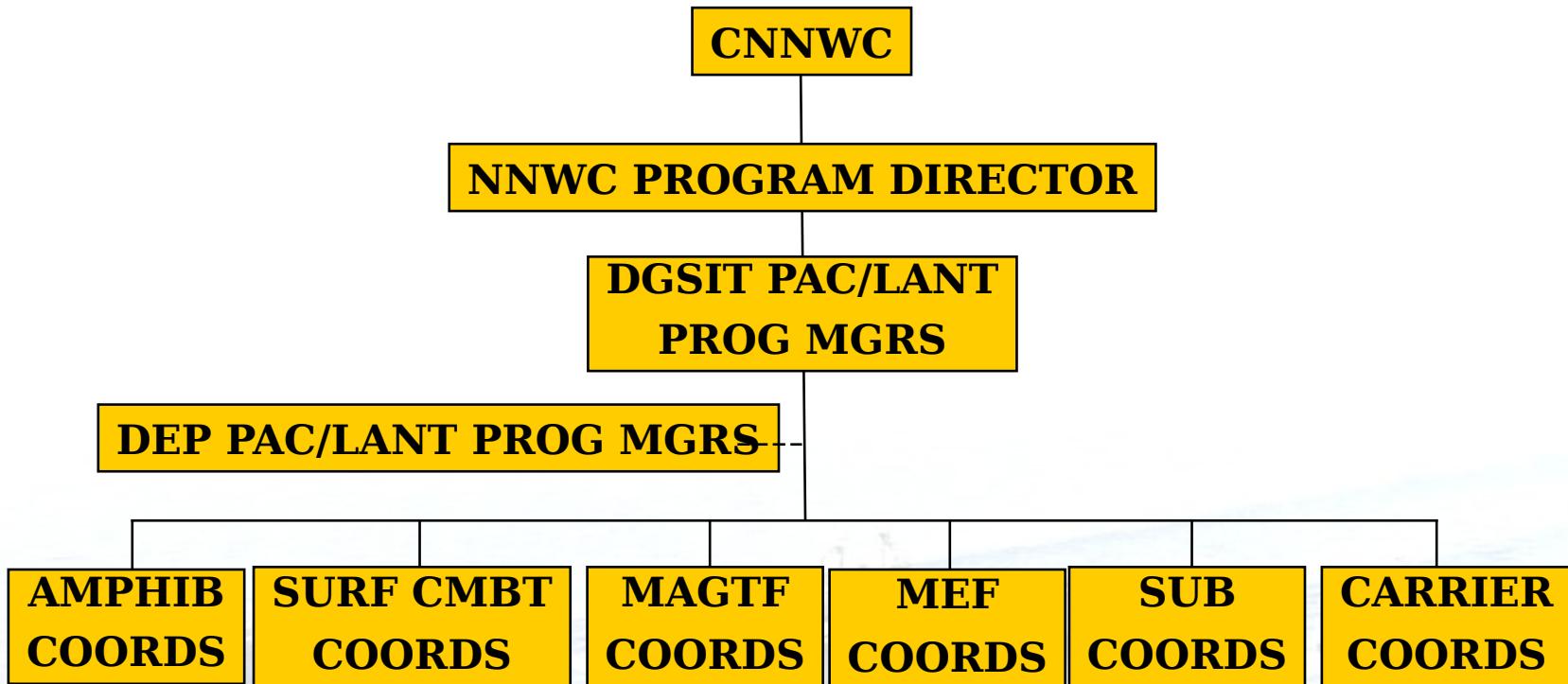




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DGSIT Team Organization



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DGSIT Process

- ♦ Build on Previous C5ISR Efforts
- ♦ Develop Tailored Test Plan
- ♦ Conduct at Sea Testing (FIT)
- ♦ Identify Issues





Preliminary Assessment

- ♦ Initiation/POA&M Message
- ♦ Baseline an individual platform's systems prior to ESG operations
- ♦ Define required coordination areas
- ♦ Actions to assist in the planning for formal testing to evaluate unit interoperability in a "Stressed At Sea" operational environment
- ♦ Tentative FIT Team requirements



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Planning Definition Survey

- ♦ Executive overview, brief watch standers on DGSIT program
- ♦ Determine concerns, confirm installed systems configuration
- ♦ At-sea system evaluations/data gathering (Interviews with N/S2, N/S3, N/S4, N/S6, Key Ship's Force and **MENNO'S STRKGRU Test Plan....**
Confirm SME employment)

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DGSIT FIT Requirements

- ◆ Post TCD
- ◆ Installations, training, SOVTs completed
- ◆ At Sea
- ◆ Stressed Operational Environment w/ common tactical focus

FIT application in a stressed operational environment, at sea, with Sailors and Marines using systems, will uncover interoperability problems that can only be seen in the unique ESG C2X environment...

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Established DGSIT At-Sea Execution

F L Y O N	DGSIT CONDUCT FINAL INTEGRATION TEST	F L Y O F F
1	5 days	1

- ♦ Evaluates C4I/SR and Combat Systems (C5I)
- ♦ Typically requires 65 personnel per Strike Group

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Typical FIT Team Composition

Representation

EMI
COMMS
DWTS
SINCGARS
SSA (MCTSSA)
ACDS/AWS/CDS
EPLRS
AFATDS
COMBAT SYSTEMS
PSC-5
ADNS
SCI ADNS
UHF MDR
IOS V1
TBMCS
CEC

SHF
NAVMACS
ISNS
EHF/NECC
WSC-8/ADMS
GCCS-M
GCCS-M SI
C2P
INMARSAT
HAVEQUICK
NAVSSI
INTEL/CRYPTOLOGY
METOC
OTCIXS/GFCP
IOS V2/3
DATA LINKS

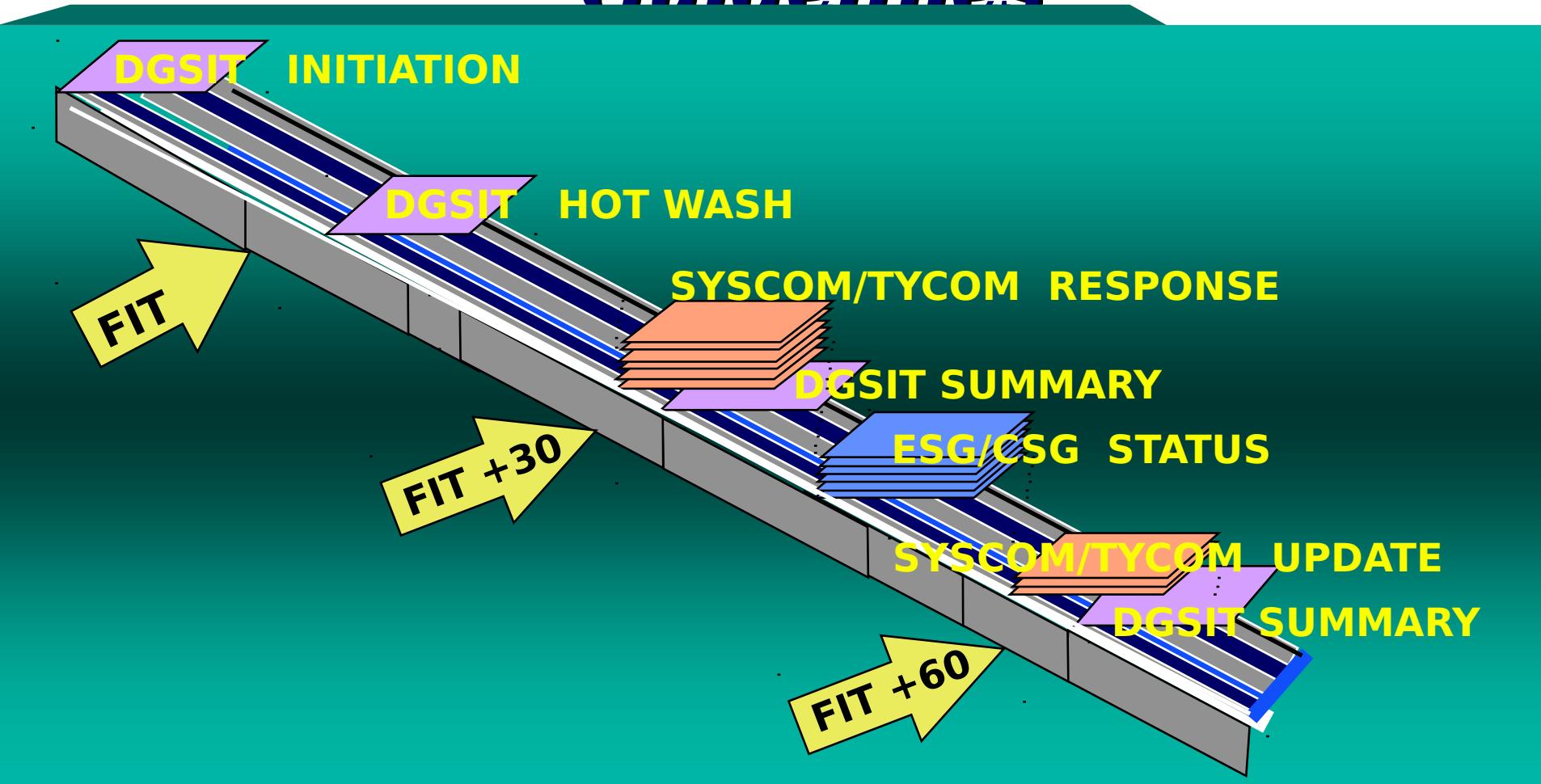
Platform	SME
CVN	22
CG	9
DDG	8
FFG	4
SSN	7
MEU	15
LHD	25
LPD	8
LSD	8



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Issue Reporting and Tracking Guidelines



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DGSIIT Notional Timeline



INITIAL COORDINATION

Determine tentative dates / initial considerations / balance funding
Establish initial planning criteria / meetings / special logistics / Confirm Initiation Message

PRELIMINARY ASSESSMENT (PARKGRU, MEU, Numbered FLT, MEF)

Develop POA&M / SME requirement / system installation status messages
Schedule / track configuration / review OPTASKs / review CEPs / review

MEU IM Plan

USMC assess assigned ship spaces / Begin ECSC Testing -- validate systems connectivity
PLANNING DEFINITION SURVEY (PDS)
Executive overview / brief watch standers on DGSIT program / Extensive Interviews

Determine concerns / confirm installed systems configuration

FUll ECSC RMEU TESTING (FET)

Underway Joint, integration and interoperability testing with data extraction

Watch station training / validation of system operations

POST-FIT
support network
Immediately correct system problems where feasible / exercise ashore
Develop Hot wash report, update POA&M, assist SYSCOM / TYCOM actions

Update issues / corrections / metrics database

Typical DGSIIT SOE

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Input

	25-Feb	26-Feb	27-Feb	28-Feb	1-Mar	2-Mar	3-Mar	4-Mar	5-Mar	6-Mar	7-Mar
CCSG5					FOTC			FOTC		FOTC	
CVW5					MDUNECC						
					LINK		LINK				
						MDUDIRECT					
CDS15		HL		HL		HL		HL	HL	HL	
NCTAMS							DSCS	DSCS	DSCS		
KITTY HAWK					LINK	LINK	DSCS	BEM	DSCS	BEM	DSCS
COWPENS					MDUNECC		MDUDIRECT	BEM	ROT	BEM	
					LINK	LINK	HL	HL			
JOHN S MCCAIN		BEM	BEM		BEM	BEM					
					MDUDIRECT	FOTC					
					LINK	HL					
					MDUNECC	LINK					
FITZGERALD		FOTC			FOTC		LINK	BEM	LINK		
		HL			BEM	MDUNECC	MDUDIRECT				
VANDEGRIFT		BEM		BEM	ROT	HL	LINK	LINK			

Window to establish connectivity between designated units. SME's will coordinate and troubleshoot via system media as required with participating units. Does not require FOTC.

Window for shifting of duties. Does not need to be deconflicted with other events. PRE-EX: NONE ACFT: NONE.

HAWKLINK

Window to conduct checks with aircraft and controlling unit. Conducted in conjunction with routine training missions. PRE-EX: NONE ACFT: 1 HSL (not dedicated) NECC

Window to complete transfer of MDU from KHK APS DET via NECC. PRE-EX: NONE ACFT: NONE

DIRECT

Window to complete transfer of MDU from KHK APS DET via EHF direct. PRE-EX: NONE ACFT: NONE

MULTILINK

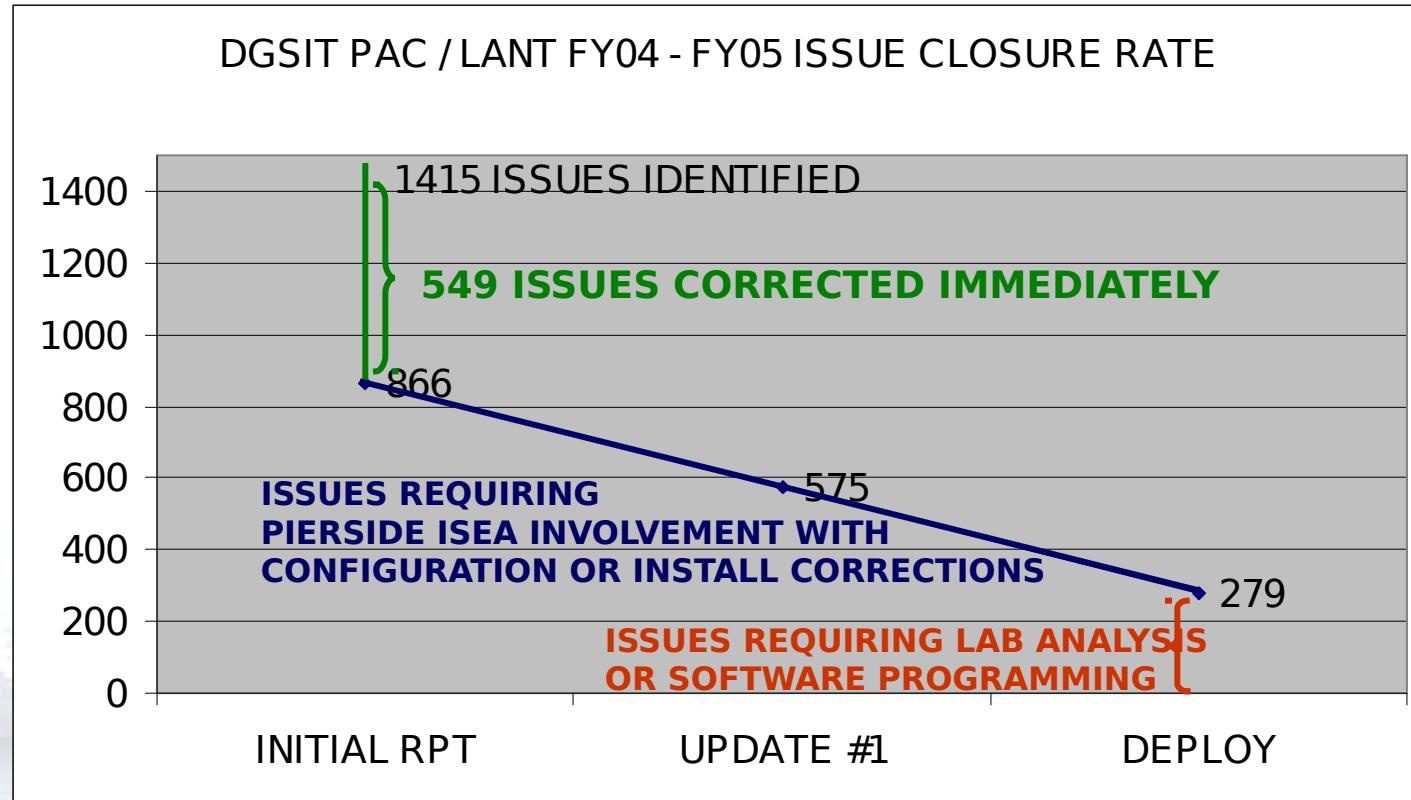
6 hour period. Requires shifting of link roles and participants and cycling of emitters and sensors. Must be deconflicted with other events. Test Director to coordinate DSCS.

End-to-End Bit Error Rate Test (BERT) with NCTAMS PAC. Must be deconflicted with other events. PRE-EX: NONE ACFT: NONE.

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Strike Group Issue Closure Rates





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The DGSIT Dividend

- ◆ SMEs are experts in their field with the ability to resolve problems and answer the “hard” questions.
- ◆ Troubled systems are operated to their maximum performance rooting out the issues.
- ◆ During conduct of DGSIT, 30-40 percent of the issues are resolved on the spot by the SME's.
- ◆ Training by SMEs is a natural

Highest dividend: DGSIT SMEs are fully utilized and their talents are put to use to maximum extent possible. Make them a part of your team effort.....

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Take Aways

In the previous 18 months:

- ◆ **1,600 system issues identified with the Fleet user**
- ◆ **600 issues resolved within hours of identification**
- ◆ Exercised reach-back /help desk capabilities
- ◆ **690 additional issues corrected prior to deployment**
- ◆ **144 man-months of system training provided**
- ◆ Fleet's system confidence increased
- ◆ **System limitations identified and workarounds provided**



DGSIT Web Sites

▼ DGSIT

<http://wwwffc.navy.mil/index.php?id=1&secid=83>

Note: Requires CAC Card for access

♦ DGSIT PAC

<https://airpacn43.san.mrms.navy.mil/n63b/n63.htm>

For userid and password contact

mike.wenck@navy.mil



DGSIT PAC POCS

- ◆ **DGSIT Program Manager**

Mr. Mark Boose (619)545-2026 mark.boose@navy.mil

- ◆ **DGSIT Deputy Program Manager**

Ms Heidi Boose (619)553-7931 heidi.boose@navy.mil

- ◆ **Amphibious DGSIT Coordinator**

Mr. Mike Martin (619) 556-1305 mike.martin1@navy.mil

- ◆ **Surface Combatant DGSIT Coordinator**

Mr. Mike Wenck (619) 437-5275 mike.wenck@navy.mil

- ◆ **MARFORCOM MAGTF DGSIT Coordinator**

Mr. Todd Moore (760) 763-4656 todd.moore@usmc.navy.mil

- ◆ **Submarine DGSIT Coordinator**

Mr. David Overton (808) 473-2239 dave.r.overton@navy.mil

- ◆ **I MEF DGSIT Coordinator**

Mr. Dan Bank (760)525-2737 dan.bank@usmc.mil



**DGSIT is a tool for your use.
Training is a big by-product!**

FINAL GOAL:
Ready for
Deployment C5I
& Combat
Systems

A map of the United States where the states are filled with the stars and stripes of the American flag.